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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Vijaylaxmi Chakravarty

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EXAMINER

HEFFINGTON, JOHN M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/759,932	Applicant(s) CHAKRAVARTY ET AL.	
	Examiner JOHN M. HEFFINGTON	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the amended filing of 11 February 2008. Claims 6 and 7 have been restricted. Claims 1-5 and 8-20 are pending and have been considered below.

Election/Restrictions

1. Applicant's election of claims 1-5 and 8-20 in a telephone conversation with James Boise on 8/22/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). **The restriction is hereby made final.**
2. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are drawn to a computer program

product residing on a computer usable medium. At paragraph 0037, the specification states that programs defining functions on the present invention can be delivered to a data storage system or a computer system via a variety of signal-bearing media, including communication media, such as computer and telephone networks including Ethernet. A signal carried on signal bearing media such as a network including Ethernet is none of a method, machine, manufacture or composition of matter and is, therefore, not a statutory category of invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-5, 8-12, 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. (US 5,892,948) in view of man pages section 3: Threads and Realtime Library Functions (<http://dlc.sun.com/pdf/817-3944/817-3944.pdf>), `lio_listio`, herein referred to as `listio` (note that in the document Topics in IRIX® Programming, http://www.cs.wfu.edu/~torgerse/Kokua/More_SGI/007-2478-008/sgi_html/, dated 1996-2000, that Chapter 8 Asynchronous I/O, section Multiple Operations to One File, discloses the `lio_listio` function).

Claims 1 and 15: Aoki discloses a method and computer system for concurrently executing multiple operations on a single file displayed on a graphical user interface, comprising:

- a. associating a different operation with each of a plurality of inputs (column 9, lines 47-67, column 10, lines 1-4, figures 6A-6E); and
- b. selecting a file display for a single file on a graphical user interface (GUI) after engaging a first input and a second input from the plurality of inputs (column 8, lines 41-55, figures 6A-6E), wherein
- c. a first operation is associated with the first input and a second operation is associated with the second input (column 9, lines 47-67, column 10, lines 1-4, figures 6A-6E),

but does not disclose

- a. associating a distinct visual display feature with each of the different operations;
- b. a first portion of the file display of the single file presents a first distinct visual feature associated with the first operation, and wherein a second portion of the file display of the single file presents a second distinct visual feature associated with the second operation.

However, Aoki discloses associating a distinct visual feature with an executing and non-executing function (figures 6A-6E) and associating a distinct visual feature with a branch function (figure 10). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add associating a distinct visual display feature with each of the different operations to Aoki. One could have been motivated to add associating a distinct visual display feature with each of the different operations to Aoki because it would be beneficial to a user to be able to distinguish visually the various function that are composed together to form a composite function.

Listio discloses a function to allow a process to initiate a list of I/O requests within a single function call on a file identified by a file descriptor (page 75, Description).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add a first portion of the file display of the single file presents a first distinct visual feature associated with the first operation, and wherein a second portion

of the file display of the single file presents a second distinct visual feature associated with the second operation to Aiko. One could have been motivated to add a first portion of the file display of the single file presents a first distinct visual feature associated with the first operation, and wherein a second portion of the file display of the single file presents a second distinct visual feature associated with the second operation to Aiko because the purpose of Aiko is to execute a series of functions on a single data file. As disclosed, a data file icon is dragged onto the composite function icon. It is simply a design choice as to how the data file is associated with the composite function. The first function icon could just as easily be dragged to the data file icon to initiate the composition process. This would fulfill the requirement of the `lio_listio` function to set the file descriptor parameter.

Claim 8: Becka discloses a computer system for concurrently executing multiple operations on a single file displayed on a graphical user interface, the system comprising:

- a. a monitor for displaying a single file in a graphical user interface (GUI) (column 8, lines 41-55, figures 6A-6E);
- b. a plurality of inputs, each input being associated with a different operation to be applied to the single file (column 9, lines 47-67, column 10, lines 1-4, figures 6A-6E), and
- c. an input device for selecting a file display for the single file in the GUI after engaging a first input and a second input from the plurality of inputs, wherein a

first operation is associated with the first input and a second operation is associated with the second input (column 8, lines 41-55, figures 6A-6E),

but does not disclose:

- a. each different operation being associated with a distinct visual display applied to a displayed file; and
- b. wherein a first portion of the file display of the single file presents a first distinct visual feature associated with the first operation, and wherein a second portion of the file display of the single file presents a second distinct visual feature associated with the second operation.

However, Aoki discloses associating a distinct visual feature with an executing and non-executing function (figures 6A-6E) and associating a distinct visual feature with a branch function (figure 10). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add associating a distinct visual display feature with each of the different operations to Aoki. One could have been motivated to add associating a distinct visual display feature with each of the different operations to Aoki because it would be beneficial to a user to be able to distinguish visually the various function that are composed together to form a composite function.

Listio discloses a function to allow a process to initiate a list of I/O requests within a single function call on a file identified by a file descriptor (page 75, Description).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add a first portion of the file display of the single file presents a first distinct visual feature associated with the first operation, and wherein a second portion of the file display of the single file presents a second distinct visual feature associated with the second operation to Aiko. One could have been motivated to add a first portion of the file display of the single file presents a first distinct visual feature associated with the first operation, and wherein a second portion of the file display of the single file presents a second distinct visual feature associated with the second operation to Aiko because the purpose of Aiko is to execute a series of functions on a single data file. As disclosed, a data file icon is dragged onto the composite function icon. It is simply a design choice as to how the data file is associated with the composite function. The first function icon could just as easily be dragged to the data file icon to initiate the composition process. This would fulfill the requirement of the `lio_listio` function to set the file descriptor parameter.

Claim 2: Aiko and listio disclose the method of claim 1 and Becka further discloses subsequently executing the first and second operations on the single file, but does not disclose and confirming execution of said first and second operations (column 8, lines 41-55, figures 6A-6E), but does not disclose executing the first and second operations after the first and second distinct visual features are respectively displayed on the first and second portions of the file display. However, Aiko discloses executing the operations after the composite function is completed, each function identified by an icon

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(column 8, lines 41-55, figures 6A-6E, column 9, lines 47-67, column 10, lines 1-4, figures 6A-6E). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add executing the first and second operations after the first and second distinct visual features are respectively displayed on the first and second portions of the file display Aiko and listio. One could have been motivated to add executing the first and second operations after the first and second distinct visual features are respectively displayed on the first and second portions of the file display to Aiko and listio because if Aiko is modified to drag the functions to the data file icon instead of dragging the data file icon, then it would be obvious to wait until the desired functions are applied to the data file icon, just it would be desirable to wait until the composite function is completed before executing the functions on the data file.

Claims 3, 10 and 17: Aiko and listio disclose the method, system and computer program product of claims 1, 8 and 15 and but do not disclose the distinct visual features are color-coded. However, Aiko discloses shading a function as a distinct visual feature (figure 10). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add the distinct visual features are color-coded to Aiko and listio. One could have been motivated to add the distinct visual features are color-coded to Aiko and listio because the shading in Aiko could represent color and color is readily recognizable by a user as distinguishing one icon from another.

Claims 4, 11 and 18: Aiko and listio disclose the method, system and computer program

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product of claims 1, 8 and 15 and Aiko further discloses the distinct visual features are geometric patterns (figures 6A-6E).

Claims 5, 12 and 20: Aiko and listio disclose the method, system and computer program product of claims 1, 8 and 15, and Aiko further discloses the plurality of inputs are selected icons on the GUI (column 9, lines 47-67, column 10, lines 1-4, figures 6A-6E).

Claims 9 and 16: Aiko and listio disclose the computer system and computer program product of claims 8 and 15, and Aiko further discloses an execution unit for executing the first and second operations on the single file according to a pre-determined execution order for the first and second operations (column 2, lines 52-59).

7. Claims 13, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. (US 5,892,948) in view of man pages section 3: Threads and Realtime Library Functions (<http://dlc.sun.com/pdf/817-3944/817-3944.pdf>), lio_listio, herein referred to as listio as applied to claim 1, 8 and 15 above, and further in view of Talbert (US 2004/0114265 A1).

Claims 13 and 19: Aiko and listio disclose the computer system and computer program product of claims 8 and 15, but do not disclose the first and second files are both sensitive files selected for deletion. However, Talbert discloses overwriting with a pattern of 1's and 0's a file when a job involving the file is finished (paragraphs 0004,

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and 0005). It is common in the art to render un-readable files that are sensitive, for example, shredding a document. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add the first and second files are both sensitive files selected for deletion to Aiko and listio. One could have been motivated to add the first and second files are both sensitive files selected for deletion to Aiko and listio because it is a common practice to delete sensitive files after the need to view the files has passed.

Claim 14: Aiko and listio and Talbert disclose The computer system of claim 13 and Talbert discloses the sensitive files are erased from a hard disk on a computer by re-formatting only areas on the hard disk that had stored the sensitive files (paragraphs 0004, 0005). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add the sensitive files are erased from a hard disk on a computer by re-formatting only areas on the hard disk that had stored the sensitive files to Aiko and listio and Talbert. One could have been motivated to add the sensitive files are erased from a hard disk on a computer by re-formatting only areas on the hard disk that had stored the sensitive files to Aiko and listio and Talbert because, normally, when a file is deleted from a hard disk, only the pointers to the file are deleted and overwriting the file with a pattern of 1's and 0's actually deletes the contents of the file. It provides a greater guarantee that a sensitive file is unreadable if a pattern of 1's and 0's is used to overwrite the file.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Heffington whose telephone number is (571) 270-1696. The examiner can normally be reached on Mon - Fri 8:00 - 5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH
7/2/08

/Weilun Lo/

Supervisory Patent Examiner, Art Unit 2179